

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name FINISH® DUAL ACTION™ Dishwasher Cleaner - All Scents
CAS # Mixture

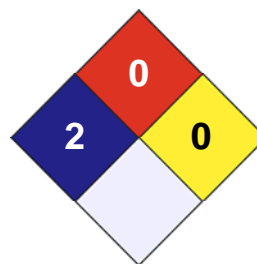
This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the Canadian Workplace Hazardous Materials Information System (WHMIS). This MSDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulation.

Product Use Dishwasher Cleaner

Distributed by Reckitt Benckiser (Canada) Inc.
 1680 Tech Avenue Unit #2
 Mississauga, ON L4W 5S9
 In Case of Emergency: 1-800-338-6167
 Transportation Emergencies: 24 Hour Number:
 North America: CHEMTREC: 1-800-424-9300
 Outside North America: 1-703-527-3887

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B



2. Hazards Identification

Emergency overview CAUTION
 MAY IRRITATE EYES.
 DO NOT get in eyes.

KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.
Eyes Irritating to eyes.
Skin No known significant effects or critical hazards.
 Not expected to be a skin sensitizer.
Inhalation No known significant effects or critical hazards.
Ingestion No known significant effects or critical hazards.
Target organs Eyes. Respiratory system. Skin.
Chronic effects The finished product is not expected to have chronic health effects.
Signs and symptoms Symptoms may include redness, oedema, drying, defatting and cracking of the skin.

3. Composition/Information on Ingredients

Components	CAS #	Percent
Citric acid	77-92-9	15 - 40
Poly(oxy-1,2-ethanediyl), tridecyl-hydroxy-branched	69011-36-5	5 - 10

4. First Aid Measures

First aid procedures

Eye contact	If in eyes, IMMEDIATELY rinse eyes with water. Remove any contact lenses and continue rinsing eyes for at least 15 minutes. If irritation persists, get medical attention.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Obtain medical attention if irritation persists.
Ingestion	If swallowed, call a Poison Control Centre or doctor immediately. Have person drink a glass of water if able to swallow. Do not give anything to an unconscious person. Do not induce vomiting.
Notes to physician	Treat patient symptomatically.
General advice	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS criteria.
Extinguishing media	
Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.
Explosion data	
Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters. Advise authorities if product has penetrated drains, sewers or water pipes.
Methods for containment	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills to original containers for re-use.

7. Handling and Storage

Handling	Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. DO NOT mix with chlorine bleach or any other product as harmful fumes may result. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.
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Storage	Keep out of reach of children. Keep in properly labelled containers. Keep containers tightly closed in a cool, well-ventilated place.
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8. Exposure Controls/Personal Protection

Exposure limits	Not applicable.
Engineering controls	General ventilation normally adequate.
Personal protective equipment	Consult the product label for special protection or precautions that have been identified for using this product under directed consumer use conditions. The following recommendations are given for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure.
Eye / face protection	Tightly fitting safety goggles. Emergency responders should wear full eye and face protection.
Hand protection	Impervious gloves. Emergency responders should wear impermeable gloves.
Skin and body protection	Usual safety precautions while handling the product will provide adequate protection against injury or irritation. Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.
Respiratory protection	Not normally required under normal use conditions. Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean-up operations.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practices. When using do not eat or drink. Washing with soap and water after use is recommended as good hygienic practice to prevent possible eye irritation from hand contact.

9. Physical and Chemical Properties

Appearance	Liquid
Colour	Blue or Yellow or Green
Form	Aqueous solution
Odour	Characteristic
Odour threshold	Not available.
Physical state	Liquid.
pH	1.5 : Not Corrosive: confirmed by experimental data
Freezing point	Not available.
Boiling point	< 100 °C (< 212 °F)
Pour point	Not available.
Evaporation rate	Not available
Flash point	Not available.
Auto-ignition temperature	Not available.
Flammability Limits in Air, Upper, % by Volume	Not available.
Flammability Limits in Air, Lower, % by Volume	Not available.
Heat of combustion	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Specific gravity	1.09 - 1.12 g/cm3
Partition coefficient (n-octanol/water)	Not available.
Solubility (Water)	Not available.
Relative density	Not available.
Viscosity	Not available.
VOC	Not available

Percent volatile Not available

10. Stability and Reactivity

Reactivity	This product may react with strong oxidising agents.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	DO NOT MIX WITH BLEACH or use in conjunction with other household products.
Incompatible materials	Acids. Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Toxicological data

Components	Species	Test results
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Citric acid (CAS 77-92-9)

Acute

Dermal

LD50

Not available

Inhalation

LC50

Not available

Oral

LD50

Mouse

5040 mg/kg

Rat

3000 mg/kg

Poly(oxy-1,2-ethanediyl), tridecyl-hydroxy-branched (CAS 69011-36-5)

Acute

Dermal

LD50

Not available

Inhalation

LC50

Not available

Oral

LD50

Rat

1080 mg/kg

Effects of acute exposure

Eye contact

Irritating to eyes.

Skin contact

No known significant effects or critical hazards.
Not expected to be a skin sensitizer.

Inhalation

No known significant effects or critical hazards.

Ingestion

No known significant effects or critical hazards.

Sensitisation

The finished product is not expected to have chronic health effects.

Chronic effects

The finished product is not expected to have chronic health effects.

Carcinogenicity

The finished product is not expected to have chronic health effects.

Mutagenicity

The finished product is not expected to have chronic health effects.

Reproductive effects

The finished product is not expected to have chronic health effects.

Teratogenicity

The finished product is not expected to have chronic health effects.

Name of Toxicologically Synergistic Products

Not available.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data		Species		Test results
Components				
Citric acid (CAS 77-92-9)				
<i>Acute</i>				
Crustacea	EC50	Daphnia magna		120 mg/l, 72 hr
Aquatic				
<i>Acute</i>				
Fish	LC50	Bluegill (Lepomis macrochirus)		1516 mg/l, 96 hr
Persistence and degradability	Not available.			
Bioaccumulation/accumulation	Not available			
Mobility in environmental media	Not available.			
Environmental effects	Not available.			
Aquatic toxicity	Not available.			
Partition coefficient	Not available.			
Chemical fate information	Not available.			

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

IATA/ICAO (Air)

Not regulated as dangerous goods.

IMDG (Marine Transport)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
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Product Registration: Product is compliant with CCCR regulatory guidelines; a specific registration is not required for this product.

Canada WHMIS Ingredient Disclosure: Threshold limits

Citric acid (CAS 77-92-9) 1 %

WHMIS Classification	Exempt - Consumer product
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Inventory status

Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

This product should only be used as directed on the label and for the purpose intended. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Further information

FINISH® DUAL ACTION™ Dishwasher Cleaner - Citrus Fresh - 0347184v2.0
FINISH® DUAL ACTION™ Dishwasher Cleaner - Fresh Scent - 0347178v3.0

Issue date

11-August-2014

Effective date

01-August-2014

Expiry Date

01-August-2017

Prepared by

Reckitt Benckiser Regulatory Department Phone: 800-333-3899

Other information

For an updated MSDS, please contact the supplier/manufacturert listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.